

NATIONAL GEOSPATIAL ADVISORY COMMITTEE MEETING

December 1-2, 2009

Minutes

The National Geospatial Advisory Committee (NGAC) held a public meeting from 8:30 a.m. to 5:00 p.m. on December 1, 2009 and from 8:00 a.m. to 4:30 p.m. on December 2, 2009. The meeting was held at the Marriott Metro Center Hotel in Washington, D.C. In accordance with the requirements of the Federal Advisory Committee Act, the meeting was open to the public.

NGAC Members present:

Anne Hale Miglarese (NGAC Chair)
Steven Wallach (NGAC Vice-Chair)
Sean Ahearn
Timothy Bull Bennett
Michael Byrne
Allen Carroll
David Cowen
Jack Dangermond
Donald Dittmar
Dennis Goreham
Kass Green
Randy Johnson
Randall Johnson
Jerry Johnston
Barney Krucoff
David Maune
Charles Mondello
Zsolt Nagy
Kim Nelson
Matthew O'Connell
John Palatiello
Jay Parrish
Mike Ritchie
David Schell
Chris Tucker

Ivan DeLoatch, Designated Federal Officer (DFO) for the NGAC, and Karen Siderelis, acting Chair of the Federal Geographic Data Committee (FGDC), were also in attendance.

NGAC Members not present:

Richard Clark
Timothy Loewenstein
Eugene Schiller

Other attendees:

Cliff Allison (NAVTEQ), Carolyn Austin-Diggs (GSA), Stephanie Ayanian (Penn State University), Wendy Blake Coleman (EPA), Bob Brick (First American), Don Buhler (BLM), Bill Burgess (NSGIC), Scott Cameron (Grant Thornton), Keith Clarke (Mapping Science Committee), Ted Cope (NGA), Will Craig (NSGIC), Pat Cummins (ESRI), Frank Derby (ACSM/PSU), Brady Foust (First American), Randy Fusaro (Census), Michelle Gallinger (LOC), Hank Garie (Grant Thornton), Tricia Gibbons (LEAD Alliance), Tom Keiter (Penn State University), Dennis Klein (Boundary Solutions, Inc.), Roy Kolstad (NAVTEQ), Roxanne

Lamb (FGDC), Tony LaVoi (NOAA), Justine Lazaro (GAO), Butch Lazorchak (LOC), Steve Lewis (USDOT), Stephen Lowe (USDA), Arista Maher (FGDC), John Mahoney (FGDC), Jonathan Mann (GSA), Anthony Mercaldo (GAO), Louise Sabol (Design + Construction Strategies), Karen Schuckman (Penn State University), Ken Shaffer (FGDC), Lea Shanley (AAAS), Laurence Socci (The C.L.A. Group, LLC), Greg Snyder (USGS), Stephen Stept (Penn State University), Larry Sugarbaker (USGS), Tim Trainor (Census), John Vocino (GAO), Dan Widner (VA GIS), Mike Wooster (Sanborn)

TUESDAY, DECEMBER 1

Call to Order & Welcome

NGAC Chair Anne Hale Miglarese called the meeting to order at 8:30 a.m., welcomed the committee members and audience to the meeting, and summarized the meeting agenda. Ms. Miglarese noted that an opportunity for public comment would be provided during the afternoon of December 2. Public observers were introduced to the Committee.

Review and Adoption of August 2009 Meeting Minutes

Ms. Miglarese reviewed the draft minutes from the August 2009 NGAC meeting and called for approval.

DECISION: The NGAC adopted the minutes of the August 2009 NGAC meeting.

Dialogue with the Mapping Science Committee (MSC)

Dr. Keith Clarke, Professor at the University of California Santa Barbara and Chair of the Mapping Science Committee (MSC) of the National Research Council, gave a presentation on the activities of the MSC.

Dr. Clarke provided a brief description of the mission, history, and goals of the National Academies of Science. The National Research Council, a component of the National Academies, established the MSC in 1989. The MSC's scope includes fundamental research and science for GIS, policies regarding spatial data, technological and institutional developments for improving spatial data infrastructures, collection and dissemination of spatial data, human resources and education in support of the advancement of GIS, and hardware and software systems supporting GIS. MSC's range of activities include providing an impartial forum for GIS issues, developing emerging study ideas, responding to agency requests, outreach, and sponsorship of research.

A key focus for the MSC is to assess the developments in the field and to solicit ideas on problems from the academic and other communities. MSC meets on a regular basis (approximately every 6 months). The MSC often invites subject matter experts to present at its meetings. The process of conducting studies involves meetings, workshops, and briefings to gather information. The NRC coordinates a rigorous peer review for all reports.

Dr. Clarke provided an overview of several recent reports published by the MSC. A 2009 report, *"Mapping the Zone: Improving Flood Map Accuracy,"* examined issues related to elevation data and flood mapping. This report was sponsored by FEMA and NOAA. It was a sequel to the 2007 report *"Elevation Data for Floodplain Mapping."* This report, which was developed after Hurricane Katrina, examined issues related to floodplain mapping and terrain issues. A 2007 report, *"National Land Parcel Data: A Vision for the Future,"* was sponsored by BLM, Census, DHS, and FGDC. NGAC member Dr. David Cowen led the team that developed this report. NGA sponsored a 2006 report, *"Priorities for GEOINT Research at NGA,"* which recommended a set of key geospatial science issues to be addressed by NGA.

Currently, the MSC has two projects underway, a report on *"Spatial Data Enabling USGS Strategic Science in the 21st Century,"* and an NGA Workshop on future research directions. The MSC is also developing ideas for future reports, including *"NSDI 2: Technical and Governance Challenges and Opportunities," "Height Modernization,"* and *"The Geospatial Time Machine."*

Dr. Clarke raised several questions for consideration by the NGAC, including the following: How can the NGAC and MSC collaborate to advance the field? What role does peer review play? Will NSDI remain a common factor? How can workforce issues be addressed? The NGAC members engaged in a dialogue on these issues and agreed to continue to coordinate with the MSC on issues of common concern.

ACTION: FGDC will provide a link to MSC reports and downloadable executive summaries that are available through the National Academies Press (<http://www.nap.edu/>)

ACTION: The NGAC will consider identifying issues to be recommended or referred to MSC for more detailed studies/reports. NGAC may also review and endorse MSC studies as appropriate.

Leadership Remarks

Karen Siderelis, Acting Chair of the FGDC, introduced Andrew Jackson, Deputy Assistant Secretary of the Department of the Interior. Mr. Jackson coordinates and oversees information technology policy for the Department of the Interior. Prior to joining Interior, Mr. Jackson practiced law and worked in management at Hewlett-Packard.

Mr. Jackson spoke about the significance of applying science toward sound decision-making, and how the NGAC can provide advice and recommendations to assist in the development of strategy and policy at DOI and with the FGDC agencies. Geospatial information is a key underlying component supporting the Secretary's priorities for Interior, including the following:

- Treasured landscapes
- Renewable energy
- Climate change
- Youth/diversity
- Water issues
- Trust responsibilities.

Mr. Jackson emphasized the need for the NGAC to think creatively about how to integrate geospatial information with management and policy initiatives. Mr. Jackson thanked the NGAC members for the work they have done since the inception of the committee. He noted that Interior is reviewing the nominations for the next round of appointments to the NGAC, and that Interior will work with the FGDC Executive Committee to develop guidance to the NGAC for 2010 and beyond. Mr. Jackson also indicated that a decision on the next Chair of the FGDC would be made in early 2010. Mr. Jackson engaged in a dialogue with the committee members and addressed a range of comments and questions.

ACTION: DOI will make decisions on FGDC leadership and priorities by end of January 2010

ACTION: DOI/FGDC will complete guidance to the NGAC prior to the March 2010 NGAC meeting

Mr. Jackson introduced Mr. Derek Douglas and Dr. Xavier de Souza Briggs, who provided presentations on the Administration's Place-based Policies initiative. Mr. Douglas is Special Assistant to the President for Urban Affairs, and Dr. Briggs is the Associate Director for General Government Programs at the Office of Management and Budget.

Developing Effective Place-Based Policies

Mr. Douglas discussed how the Administration's approach to urban policy is shifting to a focus on place. To jumpstart this process, OMB issued a Memorandum to Agencies in August 2009 which detailed the need for a new place-based policy strategy and asked for agency proposals. Agency responses to the memorandum have included a number of creative and progressive proposals. The Administration is seeking good examples of inter-agency collaboration in these proposals. Three themes emerged from the proposal process: sustainable community development, regional economic development, and neighborhood revitalization. An important component for the success of these proposals will be smart planning, and geospatial information and integration will be an integral component of this planning.

Mr. Briggs indicated that the NGAC could play a role in supporting the development of this initiative and should work through the FGDC to provide advice and recommendations where appropriate. He emphasized that the Administration is moving policy in ways that are highly dependent on data. He encouraged the geospatial community to seize the opportunity and identify ways that geospatial information can be utilized to assist in developing effective place-based policies.

Dr. Briggs reiterated that OMB was encouraged by the response to the August memorandum. He identified several opportunities to geo-enable place-based policies: First, through democratizing data. Open government is an important priority of the Administration. Tools such as USASpending.gov are being enhanced by place-based policies. The democratization of data leads to a more informed conversation about these issues. Second, developing national policy priorities (including local and regional priorities) with geospatial tools can be very beneficial. The mortgage crisis response is an example of this local/regional prioritization through geo-enabling. Third, economic development planning can benefit from geo-enabled data. Workforce investment, education, and economic development are interdependent. The budget passback will be used as a vehicle for examining opportunities in these areas. Dr. Briggs indicated that he anticipates seeking advice from the FGDC and NGAC to help identify and implement priorities and key practices.

ACTION: FGDC Executive Committee will identify opportunities to support place-based projects identified through FY 2011 budget process.

ACTION: FGDC will compile notes from discussion on place-based policies and provide to NGAC members.

National Geospatial Forum

Stephen Lowe, Geospatial Information Officer at USDA, provided a presentation on plans for the FGDC Virtual Forum scheduled for December 9, 2009. The forum, which will be a webcast, will focus on place-based policy issues. The FGDC plans to hold a series of virtual forums to improve outreach and to utilize social media technologies. The initial forum will target an audience of Federal executives. Subsequent events will be open to broader audiences. The December forum will begin with an introduction by USDA Secretary Tom Vilsack, followed by brief presentations by a panel of geospatial managers and executives. Panelists will participate in an interactive discussion with forum participants. Mr. Lowe invited members of the NGAC to participate in the initial forum as observers. Mr. Lowe also thanked the members of the NGAC Communications Subcommittee for their input and suggestions in the design of the forums.

ACTION: NGAC members will be invited to observe December 9 FGDC Virtual Forum.

ACTION: Communications Subcommittee will continue to provide input and help publicize the external forum events in 2010.

Subcommittee Reports and Updates

Economic Recovery

Kim Nelson provided an overview of the draft paper developed by the Economic Recovery Subcommittee documenting lessons learned for the geospatial community from the Economic Recovery bill. The paper describes internal and external issues and includes a number of recommendations. The paper discusses next steps, including supporting efforts to complete key data sets such as imagery, elevation, and parcels; supporting development of a National Map Strategy and Plan through the NGAC National Map Subcommittee; supporting FGDC in developing outreach strategies (including the use of social media); actively engaging in committee discussions; and supporting the development of a National Geospatial Policy. Ms. Nelson asked for any final comments or suggestions on the paper.

Geospatial Policy Benefits Paper

Zsolt Nagy presented on the draft Geospatial Policy Benefits paper. A work group which included Mr. Nagy, Dennis Goreham, and Barney Krucoff developed the paper to briefly describe the benefits of

developing a new National Geospatial Policy. The Benefits Paper identifies number of issues that could be affected through the development of a policy, including financial/mortgage oversight, climate change, critical infrastructure, emergency response, energy independence, and other key issues. Mr. Nagy asked for any final comments or suggestions on the paper.

Emerging Technologies

Michael Byrne provided a status report on the activities of the Emerging Technologies Subcommittee. The purpose of the subcommittee, which was established in August 2009, is to explore emerging technologies and advise the FGDC on opportunities and potential impacts.

The initial goals of the Subcommittee include developing a base set of literature on emerging technologies (e.g., cloud computing); providing advice and recommendations on applications like Data.gov, Apps.gov and Recovery.gov; providing insight on social networking tools; and developing recommendations on how emerging technologies might influence place-based initiative priorities. The NGAC discussed opportunities and possible directions for the Subcommittee. The Subcommittee agreed to develop an action plan for future activities.

ACTION: The Emerging Technologies Subcommittee will develop an initial plan of action prior to the March 2010 NGAC meeting.

Communications Subcommittee

Kass Green provided an update on the activities of the Communications Subcommittee. The Subcommittee has provided input into the design and format for the planned FGDC Virtual Forums. The Subcommittee also agreed to provide suggestions on success factors for the Virtual Forums. Ms. Green also provided an update on NGAC-related presentations at recent conferences, including the ASPRS conference and the NASCIO conference. Committee members were encouraged to communicate their involvement in conferences to the Subcommittee.

Geospatial Revolution Project

Stephanie Ayanian, Tom Keiter, and Stephen Stept of Penn State University provided a presentation on the "Geospatial Revolution" project. The project will be a web-based series of broadcasts documenting the expansion and broad variety of uses of geospatial technology. The team sought ideas and suggestions from the NGAC about stories to be featured in the documentary. The audience is the general public, so the stories should be accessible. A video preview of the project was shown to the Committee.

The committee discussed several topics and provided feedback to the Penn State Team. The topics included the following questions:

- Identify what people need to understand about place-based technology.
- What are the specific applications or uses of this technology that best identify its importance for the general public?
- Who are the best people to talk to about suggested applications/uses in these stories?

ACTION: NGAC members provide additional feedback/story ideas for Geospatial Revolution project to Penn State team by end of December.

NGAC Membership Recognition

Mr. DeLoatch and Ms. Siderelis recognized the members of the NGAC for their service as "charter members" of the committee during its initial two-year term. On behalf of the FGDC member agencies, they provided plaques to the NGAC members recognizing their service.

Adjournment for Day 1

The Chair adjourned the meeting at 5:00 p.m.

WEDNESDAY, DECEMBER 2

Welcome, Summary of Day 1, Overview of Agenda

The Chair convened the second day of the meeting at 8:00 a.m., reviewed the previous day's activities and logistics for the day, and provided an overview of the agenda for the day.

FGDC Update

Ivan DeLoatch provided an update on FGDC activities, including the following:

Geospatial Line of Business

Current Geospatial LoB activities include the following:

- Surveying Federal agencies to identify short and long-term common service goals to incorporate into the LoB business plan
- Working to Geo-enable shared services across agencies
- Working to support implementation of the Place-Based Policies initiative
- Meeting with OMB to discuss their comments on the A-16 Supplemental Guidance and update the guidance as required
- Evolving the Geospatial Profile toward FSAM Segment Architecture

SmartBuy Update

The Geospatial SmartBuy is pending the announcement of the final contract awards. The Technical Evaluation Board completed final vendor selection in July 2009. The majority of vendor awards were completed in September 2009. The final awards are pending final approval and signature. The Rollout Kit web page with SmartBUY materials and press releases are ready for release upon final approval.

FY 2009 FGDC Annual Report

The 2009 FGDC Annual Report has been completed. Copies were provided to NGAC members. The featured story in the annual report is 'The Mortgage Crisis and Land Parcel Data.' The story featured NGAC member David Cowen.

Place-Based Policy and Programs

The FGDC is working with OMB and senior Administration officials to support the Place-Based Policies initiative. FGDC Executive Committee members met with EOP leadership and initiated discussions on FGDC initiatives to support the Place-Based efforts. The Place-Based initiative will be a key discussion topic of the first FGDC Virtual Forum, which is scheduled for December 9. The first forum is targeted at Federal geospatial executives

Recovery.gov

A section of the American Recovery and Reinvestment Act (ARRA) of 2009 called for establishing "...a website on the Internet to be named Recovery.gov, to foster greater accountability and transparency in the use of funds made available in this Act." FGDC has worked with the Recovery Board to establish a mapping component to the Recovery.gov website and to the ARRA reporting process. The development of this function is consistent with the NGAC recommendations on geoenabling the Recovery.gov site.

Transportation for the Nation

Steve Lewis of the U.S. Department of Transportation (DOT) provided a presentation on the Transportation for the Nation (TFN) initiative. DOT is working with stakeholders, including NSGIC, to develop a strategic plan for Transportation for the Nation. DOT is in the process of awarding a contract to a vendor to assist in the process of developing the strategy. The effort will entail engaging the stakeholder community (government, private sector, open source) to help define requirements, challenges, and opportunities, as well as exploring implementation issues such as funding requirements and sources.

The next steps include creating a steering committee, conducting interviews, workshops, and meetings to identify what is working and what is needed. USGS and Census recently co-sponsored a meeting of federal stakeholders to initiate this process. DOT plans to hold the first workshop at the Transportation

Research Board Annual Meeting in January 2010, with additional workshops at ESRI Federal Conference in February and the ESRI International Users Conference in July.

ACTION: NGAC will invite DOT/Steve Lewis to return and report on progress in developing the Transportation for the Nation plan as it is developed in 2010.

National Map Subcommittee

Allen Carroll and Larry Sugarbaker (USGS) provided a presentation on the activities of the National Map Subcommittee. The Subcommittee is working to coordinate NGAC input into the strategic planning process for The National Map (TNM). USGS initiated the TNM strategic planning process in early 2008. The Strategic Intent and Objectives phase began in October 2009. The first draft of the strategic plan should be complete in January 2010. A final draft version should be released for public comment by June 2010. The final version of the strategic plan should be completed by October 2010. The plan will cover fiscal years 2011-2014. USGS plans to coordinate with the National Map Subcommittee and other key stakeholders throughout the planning process. The plan is being developed in coordination with USGS enterprise architecture planning.

The TNM Subcommittee met prior to the NGAC meeting to discuss the development of the plan, TNM customers and constituencies, and the role of various levels of government as customers. The Subcommittee developed key questions for discussion with the NGAC:

Question One: Should there be an agency that integrates geospatial framework data services for the nation? Should it be USGS?

Question Two: Should all National Map data be available to users without restriction? If not, under what terms should The National Map use data on which there are restrictions?

The NGAC briefly discussed these questions. On Question One, there was general sentiment that there should be an agency that integrates geospatial framework data services for the nation, and that USGS is the most logical agency to play this role. However, members noted that there were many associated details to consider, and that the NGAC should fully engage in the strategic planning process to more fully assess the implications. On Question Two, there was general sentiment that USGS should explore the use of licensed or restricted data. Kass Green recommended that NGAC members and USGS staff review the findings of the recent NRC data licensing study.

ACTION: NGAC members will provide input on first draft of TNM strategic plan through the NGAC National Map Subcommittee.

National LIDAR Concept

Greg Snyder of USGS provided a presentation on the National LIDAR Concept. USGS is beginning to explore the potential for a National LIDAR initiative, and Mr. Snyder shared some of the early thinking on this potential initiative. LIDAR has multiple uses, including analyses of vegetation, location of fault lines, infrastructure, etc. Mapping applications include land cover, structures, elevation, contours, orthoimagery, and more. There are significant Federal programs that rely on LIDAR, including the flood mapping program (FEMA), the shoreline mapping program (NOAA), and many more. The USDA Natural Resources Conservation Service uses LIDAR for conservation planning related to improved wetland boundaries. The use of LIDAR is becoming more routine in estimating vegetation attributes.

The goals of a national LIDAR program would include authoritative elevation data for Federal and State applications; nationally consistent 3D measurements of terrain, vegetation, and built features; consistent methodology for collecting, handling, processing, formatting, and delivering LIDAR point cloud data; flexibility due to variable point spacing and variable data accuracy; and data services - particularly access to authoritative data and a responsive data delivery system and archive.

Other study topics of interest may include data acquisition, interoperability, exchange, and delivery processes; fusion of LIDAR with imagery and other remote sensing data; methodologies for evaluating LIDAR data accuracy; and the potential role of cloud computing.

USGS plans to continue the development of the National LIDAR Concept in 2010. Mr. Snyder indicated that USGS will continue to consult the NGAC informed as the plans are developed.

ACTION: USGS/FGDC will identify opportunities where NGAC can provide input into development of LIDAR concept – potentially through a new NGAC Subcommittee.

Partnerships Subcommittee

Jerry Johnston provided a presentation on the activities of the NGAC Partnerships Subcommittee. The Subcommittee's purpose is to develop recommendations to facilitate productive Federal/state/local/tribal/academic/private partnerships to facilitate the advancement of the NSDI. Several Subcommittee members provided brief updates on partnership-related activities:

Charles Mondello discussed the planned ASPRS Industry Forecast project, which is being conducted through a partnership with NGA and USGS.

Barney Krucoff provided a further explanation of the partnerships model that he discussed at the August 2009 NGAC meeting, including an approach to a possible application for parcel data. Don Buhler of the Bureau of Land Management (BLM) added a brief update on parcel data activities of the BLM and the FGDC Cadastral Subcommittee. Mr. Buhler indicated that BLM received approximately \$300 million in American Recovery and Reinvestment Act (ARRA) funding overall. Approximately \$19 million of this funding is being applied to BLM/Federal Land Records enhancement and improvement activities.

John Palatiello provided an update on TARP/financial oversight activities related to parcel data. Mr. Palatiello indicated that MAPPS has engaged in a dialogue with Congressional committee staff and Federal Reserve staff to discuss possible bill language to add parcel data information to the reporting requirements under the Home Mortgage Disclosure Act (HMDA).

ACTION: FGDC will provide link to ASPRS data licensing survey results on NGAC wiki/web page (including aggregated data).

Action on Subcommittee Recommendations

Economic Recovery Paper

No additional comments on the draft paper were received, and committee adopted the paper.

DECISION: The NGAC adopted the Economic Recovery Subcommittee's paper on lessons learned from the economic recovery bill.

Benefits Paper

The work team incorporated several comments and suggestions into a revised draft paper, which Mr. Nagy presented to the Committee.

DECISION: The NGAC adopted the geospatial policy benefits paper in concept. The work team will edit and format the paper and send it to the Chair and the FGDC Executive Director for final approval.

Public Comment Period

Michelle Gallinger of the Library of Congress provided brief comments on the GeoMap Project. She indicated that since her presentation at the August 2009 NGAC meeting, with the assistance of several NGAC members, that there are 10 new partners in the GeoMap project. Ms. Gallinger thanked the NGAC members for their support of digital preservation.

Governance/Metrics Paper

Dennis Goreham and David Schell discussed the recent activities of the NGAC Governance Subcommittee, with a focus on the development of the draft paper on NSDI Metrics. Chris Tucker provided an overview of the draft paper, including a description of the paper's five parameters of assessment: societal impact, NSDI environment statistics, data development and resources, technology capabilities, and organization and governance. Highlights include the following:

Societal Impact

There needs to be an adequate level of citizen understanding about what geospatial data is and what it can do for them. Data needs to support economic development and markets. Government decision-makers need to quickly access and analyze geospatial data for decision making. Development of appropriate curricula for basic geography education is another area of opportunity.

NSDI Environmental Statistics

A better definition of the NSDI is needed, as well as better definitions and quantification of stakeholders, sectors, and market involvement.

Data Development and Resources

Data should be current, complete, accurate, accessible, and archived. There needs to be a "dashboard" view available for information as well. In a related effort, COGO is developing a qualitative NSDI report card, which will assess the status of the various NSDI data themes.

Technology Capabilities

Do we have a production grade technological infrastructure in place to share data via international standard geospatial web service interfaces? Applications are important, but we need to have the underlying data shared as a service.

Organization and Governance

Do we have an effective national governance mechanism?

The NGAC discussed the paper, the parameters of assessment, and potential actions and next steps identified by the Subcommittee. The NGAC revised the draft language on recommended actions suggested by the Subcommittee as follows:

"The NGAC endorses the high-level characteristics presented in the Phase I paper regarding a system of metrics for the NSDI to measure progress toward the desired "end-state." As a next step, the Governance Subcommittee will immediately begin building upon this Phase I deliverable to include engaging other organizations (e.g. COGO, NSGIC, FGDC Lifecycle Management Work Group, etc.) to comment on the paper and suggest their roles to:

- Define a plan for vetting the high-level concepts (performance measurement) described herein among critical (national) stakeholder organizations.
- Refine the example metrics, define candidates for support responsibility (national not federal) and recommend an implementation strategy.

The NGAC and the Governance Subcommittee will also continue to hold internal discussions regarding national NSDI governance."

The NGAC agreed on the following action:

ACTION: The NGAC endorsed the high-level concepts in the Governance Subcommittee's paper on NSDI metrics. The NGAC also agreed on next steps, including outreach by the Subcommittee to refine the metrics approach, and continued internal discussion within the NGAC regarding NSDI governance.

News and Notes Forum

Spatial Law and Policy – David Schell

Mr. Schell introduced Kevin Pomfret, a member of the Open Geospatial Consortium's Executive Committee. Mr. Pomfret provided a brief presentation on issues related to spatial law, including privacy, data ownership, national security, and protection of intellectual property.

Science, Technology, Engineering, and Mathematics Education – John Palatiello

Mr. Palatiello distributed two documents: a letter to the President regarding the Science, Technology, Engineering, and Mathematics education (STEM) initiative that advocates for geospatial education as a component of the initiative; and a chart showing the demands for place-based data in the House and Senate health care bills.

China/NSDI – Jack Dangermond:

Mr. Dangermond provided a brief presentation on the development of a Spatial Data Infrastructure in China. The government of China is developing multiple systems on many scales. China has established a national priority to make GIS a foundational information system. China's "Natural Resource and Geo Spatial Information Foundation Database Exchange System" is one of four information foundation databases in China's e-government. Related applications cut across many different programmatic areas (health and human services, national security, etc.).

Meeting Summary/Wrap-Up

The Chair concluded the meeting with a review of actions and next steps, announcements, and possible agenda items for next meeting. The NGAC agreed on the following actions:

ACTION: FGDC will compile a summary of the meeting and post to the NGAC website for use/distribution by NGAC members.

ACTION: The Chair will send a letter to the DOI Secretary summarizing committee activities over the past two years.

ACTION: The Chair will send a thank you letter to Andrew Jackson (DOI), offer to provide assistance on DOI/Administration priorities, and request follow-up meeting.

ACTION: The Chair will send thank you letters to Derek Douglas (EOP) and Xavier de Souza Briggs (OMB), offer to provide assistance on place-based initiatives and Administration priorities, and request follow-up meetings.

Next Meeting

The next NGAC meeting is tentatively planned for March 2010 in the Washington, DC area. Potential agenda topics include the following:

- Welcome/Orientation for new NGAC members
- FGDC guidance to NGAC
- Place-based policies follow-up
- FGDC Virtual Forum follow-up
- Follow-up/updates on ongoing NGAC Subcommittee activities
- Discussion of NRC data licensing study
- Discussion of geospatial technology forecast
- Discussion of "G-Commerce" business models

Meeting Adjournment

The Chair adjourned the meeting at 4:30 p.m.

Certification

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Anne Hale Miglarese, Chair, National Geospatial Advisory Committee

Ivan DeLoatch, Designated Federal Officer, National Geospatial Advisory Committee

These minutes will be formally considered by the Committee at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.

NOTE – These Minutes were approved by the NGAC on March 24, 2010

December 2009 NGAC Meeting Summary of Presentations and Handouts

The following is a list of the presentations and handouts from the meeting. These meeting materials are posted along with the minutes at: http://www.fgdc.gov/ngac/meetings/december-2009/index_html

Dialogue with the Mapping Science Committee

- MSC Presentation

FGDC Virtual Forum

- FGDC Virtual Forum Presentation

Economic Recovery Subcommittee

- NGAC Economic Recovery Lessons Learned Paper

Geospatial Policy - Benefits

- NGAC Geospatial Policy Benefits Paper

Emerging Technologies Subcommittee

- Emerging Technologies Presentation

FGDC Update

- FGDC Update
- Transportation for the Nation Presentation

The National Map Subcommittee

- TNM Presentation

National LIDAR Concept

- LIDAR Presentation

Partnerships Subcommittee

- Partnerships Presentation

Governance Subcommittee

- Governance Subcommittee Presentation
- NGAC Governance Subcommittee NSDI Metrics Paper

News and Notes Forum

- National GIS
- Spatial Law and Policy